Skynet

The Switcher Experts

IMC SKYNET ELECTRONIC CO.

65 W

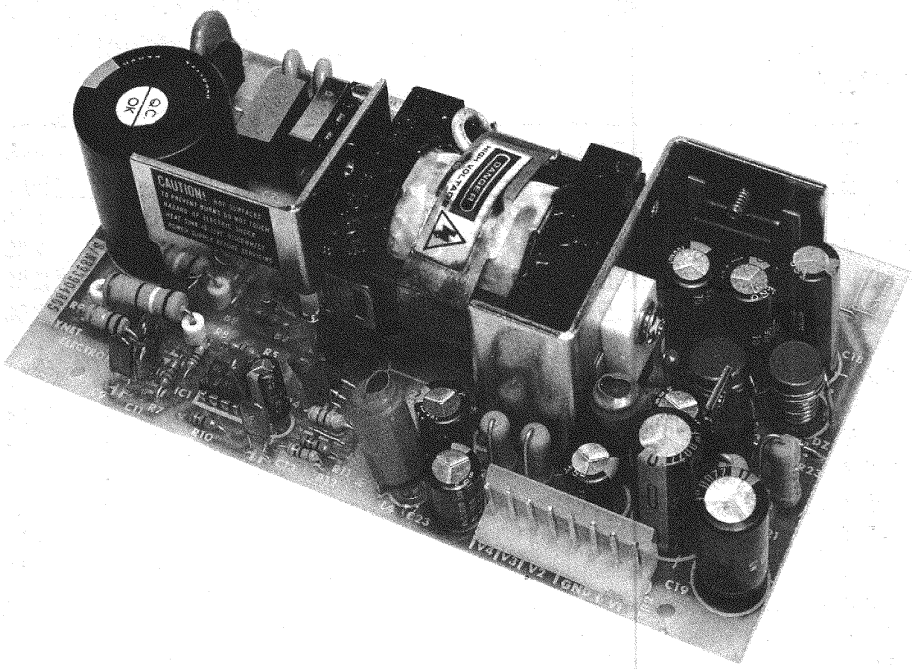
SNP-316 SERIES

FEATURES

- UL RECOGNIED FILE NO. E 104272
- CSA CERTIFIED FILE NO. LR 57450
- VDE PROJECT NO. 13018-3336-1005/A1J
- FCC CLASS B LEVEL
- UNIVERSAL INPUT

APPLICATIONS

- WORKSTATIONS
- CAD/CAM EQUIPMENTS
- VIDEOCOM
- OA EQUIPMENTS
- PERSONAL COMPUTERS



DESCRIPTION

SNP-316 series is a 65 Watts current mode PWM type switching power supply. The AC input range is universal covering from 100 VAC to 260 VAC. All models in this series have overvoltage crowbar protection on output #1, and power foldback protection on all outputs.

SNP-316 series is designed to comply with UL, CSA and VDE safety regulations. The input line filter is provided to keep the noise under 6 dB of FCC class B conducted limited. With suitable additional outside filter this series also can pass VDE class B conducted regulations.

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GENERAL SPECIFICATIONS

Input voltage .....100VAC to 260VAC

Input frequency ..... 47Hz to 63Hz
Inrush current(Cold) ...15A at 115VAC
30A at 230VAC
Operating temperature ..... 0 to 50°C
Storage temperature ..-20°C at +85°C
Cooling ..... Free air convection
Efficiency ..... 70% typical
Holdup time 20ms

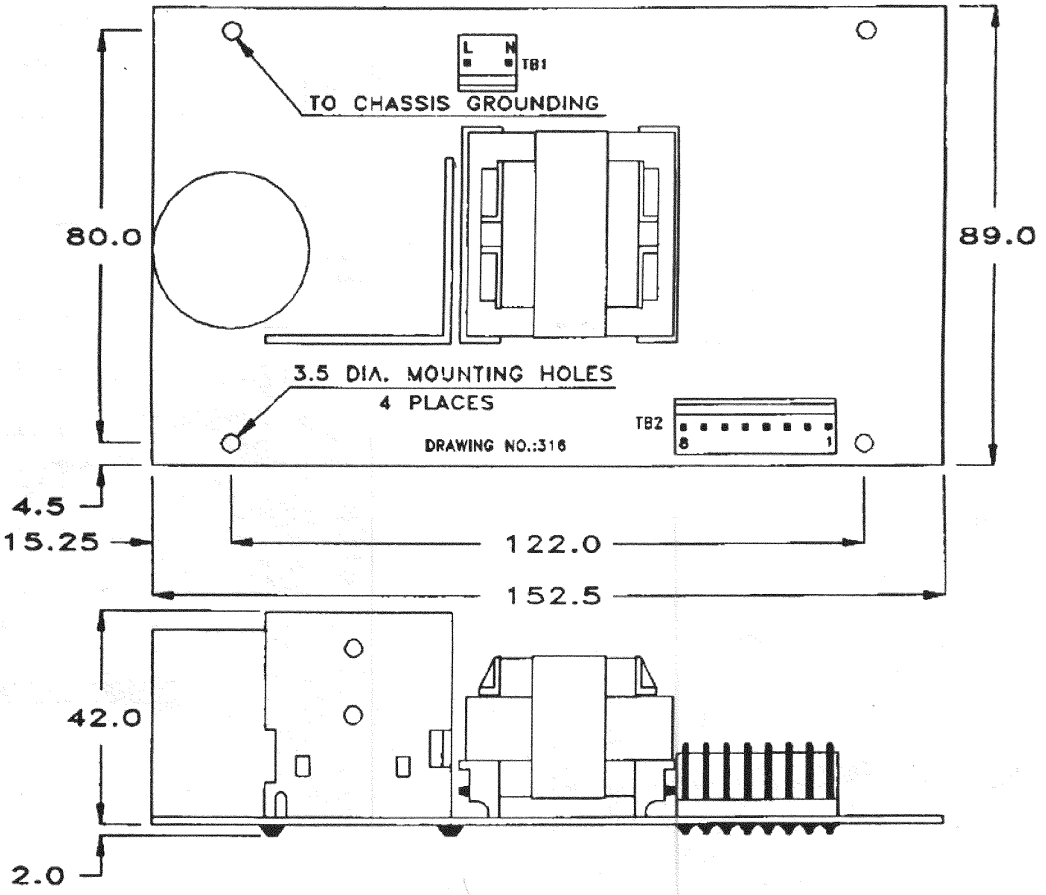
Overvoltage type ..... Crowbar
Trip point 6.2V +/- 0.5V
Or rated output +3V
Overload protection ..... Foldback
at 150% rated load
Switching frequency ..... >30KHz
Designed comply with .....
UL 478,1012, 1950
CSA 22.2 NO. 220
VDE 0806 IEC 380, 950
EMI ..... Meet FCC class "B"

OUTPUT SPECIFICATIONS

MODEL NO.	OUTPUT VOLTAGE	LOAD MIN.	LOAD RATED	LOAD MAX.	TOLERANCE + / -	RIPPLE NOISE	LINE REG.	LOAD REG.
SNP-3160	+5V	.5A	5.5A	10A	1%	50mV	1%	1%
	+12V	.2A	2.5A	4A	5%	100mV	1%	5%
	-12V	0A	0.5A	1A	10%	100mV	2%	6%
	-5V	0A	0.5A	1A	10%	50mV	2%	6%
SNP-3161	+5V	.5A	6A	10A	1%	50mV	1%	1%
	+12V	.2A	2.5A	4A	5%	100mV	1%	5%
	-12V	0A	0.5A	1A	10%	100mV	2%	6%
SNP-3162	+5V	.5A	5.5A	10A	1%	50mV	1%	1%
	+12V	.2A	3A	4A	5%	100mV	1%	5%
	-5V	0A	0.5A	1A	10%	50mV	2%	6%
SNP-3163	+5V	.5A	6A	10A	1%	50mV	1%	1%
	+12V	.2A	3A	4A	5%	100mV	1%	5%
SNP-3166	+5V	.5A	13A		1%	100mV	1%	1%
SNP-3167	+12V	.3A	5.5A		1%	100mV	1%	1%
SNP-3168	+15V	.3A	4.5A		1%	150mV	1%	1%
SNP-3169	+24V	.2A	2.75A		1%	150mV	1%	1%

Note:
1. Each output can provide up to maximum load, but total load can not exceed 65 Watts continuously.
2. The main output of all models is adjusted to +/- 1% at 60% rated load at factory.
3. Tolerance is measured with all outputs at 60% rated load.
4. Line regulation is measured from low line to high line at rated load.
5. Load regulation is measured by +/- 40% load change from 60% rated load, and all other outputs is kept at 60% rated load.
6. Ripple & noise is measured by using a 12" twisted wire terminated with a 47uF capacitor.
7. Efficiency is measured at rated load.
8. All parameters except line regulation are specified at 115/230 VAC input, rated load, 25°C ambient.

MECHANICAL SPECIFICATIONS



Note:

1. Dimensions shown in : mm (+-0.4mm)
2. PCB size: 89mm X152.5mm
3. Mounting holes : 80mm X 122mm
4. Weight : 380 g Approx.

5. Connectors :
   TB1- AC INPUT:
   Molex 5273-3 withdraw center pin or equivalent.
   TB2- DC OUTPUT:
   Molex 5273-8 or equivalent.

Pin Assignment:

PIN / MODEL	1	2	3	4	5	6	7	8		
SNP-3160	5V	5V	GND	GND	12V	12V	-12V	-5v		
SNP-3161	5V	5V	GND	GND	12V	12V	-12V	NC		
SNP-3162	5V	5V	GND	GND	12V	12V	NC	-5V		
SNP-3163	5V	5V	GND	GND	12V	12V	NC	NC		
SNP-3166	5V	5V	5V	5V	GND	GND	GND	GND		
SNP-3167	12V	12V	12V	12V	GND	GND	GND	GND		
SNP-3168	15V	15V	15V	15V	GND	GND	GND	GND		
SNP-3169	24V	24V	24V	24V	GND	GND	GND	GND		

ELECTRICAL PERFORMANCE

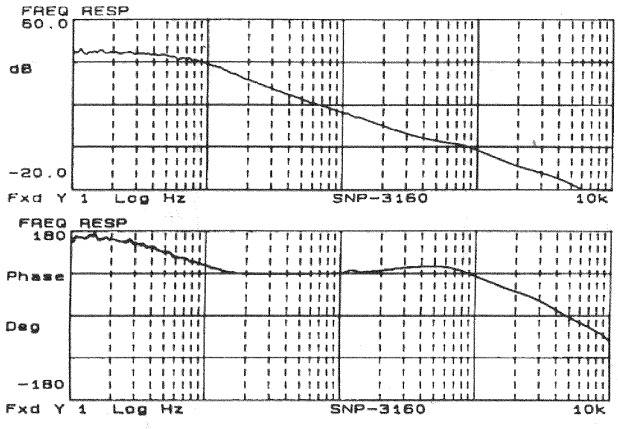


Fig.1 BODE DIAGRAM

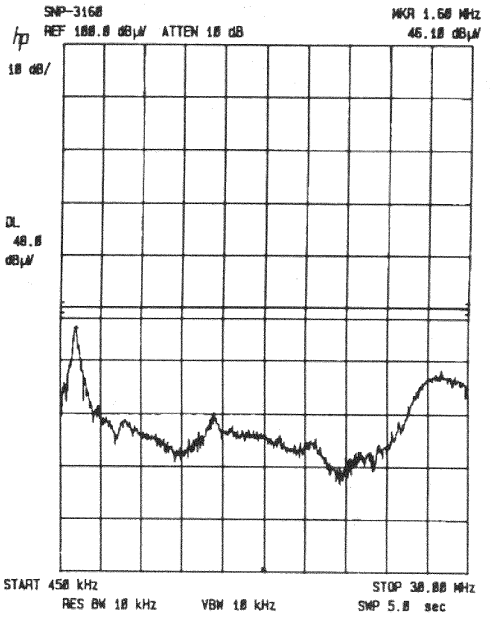
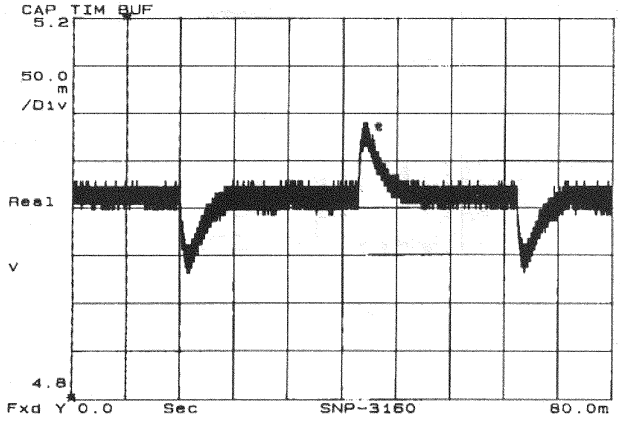


Fig.3 CONDUCTED NOISE



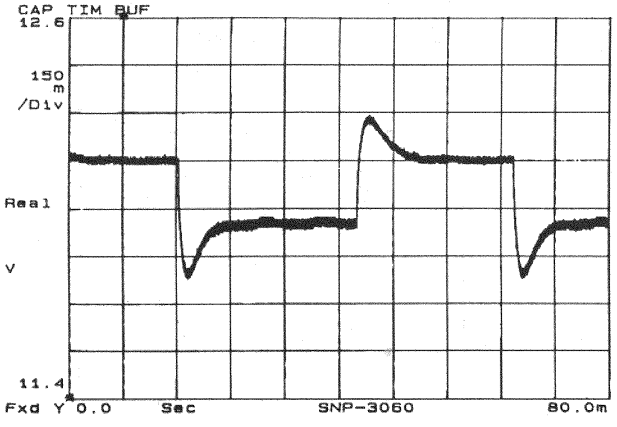


Fig.2 STEP RESPONSE

Note:

Fig.1 Show the stability of the circuitry by Bode Diagram.

Fig.2 Show the stability of the main loop (+5v) by changing the load of major aux. output from 20% to 100%.

Fig.3 Show the conducted noise level by 100% resistance loading.